

BRIEF COMMUNICATION

**THE EUROPEAN SHORE CRAB, *CARCINUS MAENAS* IN THE COORONG — A POTENTIAL THREAT TO LOCAL FISHERIES**

This note is to record the presence of the European Shore Crab, *Carcinus maenas* (Linn.) (Fig. 1), in the Coorong, South Australia, and to alert agencies to the

specimens are usually grey-green. Just how this specimen got into the Coorong is open to conjecture. Most shipping activities in the Coorong are recreational and passage



Fig. 1. *Carcinus maenas* ♂ from West Lakes, S.A.

damaging effects it may have on the ecology of the Coorong and hence the local fishing industry, should it become established.

Ten years ago<sup>1</sup> I recorded the occurrence of *C. maenas* in S. Aust. and gave a brief overview of its introduction to Australia and current distribution. In S. Aust. the species had been restricted to the Outer Harbour, West Lakes and Port River areas, habitats it typically favours. It was thought at the time that natural spread was unlikely due to unsuitable habitats along the coast, but that introduction via ships' fouling and ballast was possible. Such an introduction appears to have occurred at Hallett Cove, 25 km S. of Adelaide, by shipping activities at the nearby oil refinery at Port Stanvac<sup>2</sup>. The recent capture of a specimen from the Coorong, however, if it is not an isolated specimen, suggests that the dispersal abilities of the crab have been underestimated.

The Coorong specimen, a mature male (carapace 85 mm × 65 mm), was caught by a local fisherman, Mr W. Ayres, in December 1986 near "Ti Tree" about 6 km S.E. of Tauwichee Barrage, (about 20 km from the Murray River mouth). It was mottled light brown-grey in colour but

through the mouth is considered hazardous and is rarely attempted. Similarly, it is doubtful that a relatively poor swimmer such as *C. maenas*<sup>3</sup> (or its larvae) could have entered the Coorong by this route on its own. The possibility that it is an isolated case of human transfer cannot be ruled out but seems unlikely.

While *C. maenas* may not be of much ecological significance in the already degraded Port Adelaide-Outer Harbour area<sup>1</sup>, its potential effect on the fauna of the Coorong is unknown. Its aggressive, non-selective predatory habits have already made it a pest in New England, U.S.A., where it is the major predator of the commercially harvested soft-shell clam, *Mya arenaria* Linn.<sup>4</sup> It has also recently been recorded from South Africa where laboratory experiments have shown that it is a potential predator of a number of local molluscs and perhaps other marine life.<sup>3</sup> Should *C. maenas* become established in the Coorong it may become a major predator of a variety of local fauna and could alter the ecology of the Coorong Lagoon sufficiently to threaten the local fishing industry.

The current status of *C. maenas* in the Coorong is unknown and no more specimens have been forthcoming from fishermen since the initial discovery. Future monitoring of the situation is essential because once established, *C. maenas* could be difficult to control in a semi-closed system such as the Coorong. More important however, is to establish how this animal initially arrived in the Coorong so that future access can be prevented. I am grateful to Bill Ayres, Meningie, for bringing the

specimen to my attention and for trying to capture more specimens.

<sup>1</sup>Zeidler W. (1978) *S. Aust. Nat.* 53(1), 11-12.

<sup>2</sup>Rosenzweig, P. A. (1984) *S. Aust. Nat.* 59(1), 18-19.

<sup>3</sup>Joska, M. A. & Branch, G. (1986) *African Wildlife* 40(2), 63-65.

<sup>4</sup>Hanks, R. W. (1961) *Proc. Natn. Shellfish Assoc.* 52, 75-86.

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